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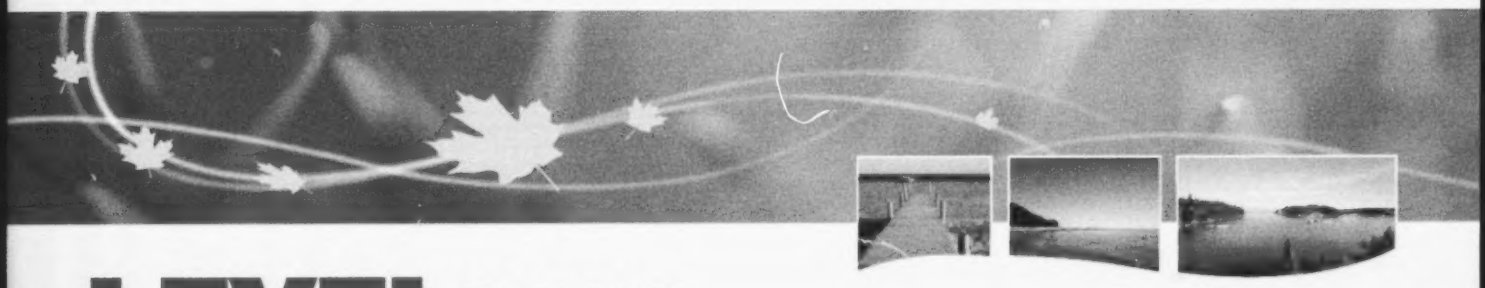

LEVELnews

Great Lakes — St. Lawrence River Water Levels

Great Lakes levels above average to start summer

Water levels of all of the Great Lakes are well above average going into summer. The month of May was dry for Lake Superior, continuing the trend seen in the previous two months, and resulting in a below-average rise in May. The rest of the Great Lakes saw above-average water supplies resulting in above-average rises for Lakes Michigan–Huron, Erie and Ontario through the month of May. The water levels in the lower St. Lawrence River were well-above average due to increasing flows from Lake Ontario offsetting declining flows from the Ottawa River through the month.

New web site

The Government of Canada has updated its Great Lakes water levels and related data Web page. This Web page contains links to official sources of Great Lakes water levels information from Canadian and United States agencies. Useful information for summer activities around the Great Lakes found on the Web site includes: hourly water levels at gauging sites, local wave and wind conditions, water temperature, and water level forecasts for the coming months. To find the updated Web page go to: https://www.canada.ca/en/environment-climate-change/services/water-overview/quantity/great-lakes-levels-related-data.html.

Great Lakes Water Level Information

Lake	May 2018 Monthly Mean Level		Beginning-of-June 2018 Level	
	Compared to Monthly Average (1918–2017)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2017)	Compared to One Year Ago
Superior	14 cm above	6 cm below	13 cm above	9 cm below
Michigan–Huron	44 cm above	12 cm above	46 cm above	12 cm above
St. Clair	55 cm above	7 cm above	55 cm above	6 cm above
Erie	57 cm above	6 cm above	57 cm above	4 cm above
Ontario	24 cm above	54 cm below	20 cm above	61 cm below

Canada

May monthly lake levels

All the Great Lakes had above-average monthly mean levels in May. Lake Superior was the closest to average due to dry conditions in its watershed over the last few months and Lake Erie was the highest above average due to continued wetter water supplies. Lake Superior was 14 cm above its period-of-record (1918–2017) May monthly mean water level but 6 cm below its value in May 2017. Lake Superior's monthly mean water level has not been lower compared to the same time one year ago since April 2017. Lake Superior's last three months of dry conditions also resulted in a monthly mean level 24 cm below the record high for May, much further apart than just a few months ago in March, when levels were only 7 cm lower. Lake Michigan–Huron's monthly mean level in May was 44 cm above average, 12 cm higher than last May's level and the highest it has been since 1997. Lake Erie's monthly mean level was 57 cm above average, 6 cm above the level of the previous May and the highest it has been since 1986. Lake Ontario's May monthly mean level was 24 cm above average but 54 cm lower than last year's record setting levels.

Lake level changes

All the Great Lakes rose through the month of May, which is typical at this time of year. Lake Superior was the only lake to have a less than average rise due to dry conditions, while the other lakes all had greater-than-average rises due to wetter conditions. Below average water supplies combined with higher than average outflow for the third month in a row resulted in Lake Superior rising only 8 cm through May, when on average (1918–2017) it rises 10 cm. Lake Michigan–Huron was relatively the wettest of the lakes with a rise 13 cm over May, higher than its average rise of 8 cm. Lake Erie levels rose 8 cm over May, higher than its average rise of 6 cm. Lake Ontario rose 10 cm over May, slightly more than its average rise of 9 cm. Lake Ontario's above-average rise was due mainly to a combination of well above-average inflows moderated by above-average outflows keeping its rise close to average.

Beginning-of-June lake levels

Lakes Michigan–Huron and Erie both had beginning-of-June levels higher than those of last year, while Lakes Superior and Ontario both had levels lower than those of last June. Lake Superior's beginning-of-June level was 13 cm above average (1918–2017), but 9 cm below the level at this time last year. Lake Michigan–Huron's beginning-of-June level was 46 cm above average, 12 cm higher than last year and the highest it has been at this time of year since 1997. Lake Erie was 57 cm above average at the beginning of June and 4 cm higher than its level this time last year. Lake Erie was the highest it has been since 1997 and only 8 cm below the record high set in 1986. Lake Ontario's level at the

May Precipitation over the Great Lakes[1,2]

Great Lakes Basin	**105%**	**Lake Erie**	**103%**
Lake Superior	**107%**	**(including Lake St. Clair)**	
Lake Michigan–Huron	**113%**	**Lake Ontario**	**65%**

May Outflows from the Great Lakes[1]

Lake Superior	**110%**	**Lake Erie**	**121%**
Lake Michigan–Huron	**113%**	**Lake Ontario**	**115%**

[1] As a percentage of the long-term May average.
[2] US Army Corps of Engineers
NOTE: These figures are preliminary.

start of June was 20 cm above average but 61 cm lower than last year when the lake was near its record-high peak in 2017. At the beginning of June, all of the lakes were at least 34 cm above their chart datum level.

Water levels forecast

Both Lakes Superior and Michigan–Huron are expected to rise through the month of June relative to their beginning-of-month levels, and assuming average water supply conditions, while Lake Erie and Ontario are expected to begin their seasonal decline.

Based on past conditions on the lakes (1918–2017) and their beginning-of-June water levels, all the Great Lakes are likely to remain above average through the summer. Lakes Michigan–Huron and Erie will stay above average even if very dry conditions are encountered. Levels of Lakes Superior and Ontario could fall below average before the end of summer, if very dry conditions occur. Even if very wet conditions are encountered, it is unlikely that any of the lakes will hit their record high levels this summer. Everyone around the Great Lakes should remain prepared for higher water levels, however all the lakes in the coming months will likely begin their seasonal declines typical for the late summer and fall period. For a graphical representation of recent and forecasted water levels on the Great Lakes, refer to the Canadian Hydrographic Service's monthly water levels bulletin at: http://tides-marees.gc.ca/C&A/bulletin-eng.html.

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